

Mineral Industry Surveys

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ANTIMONY IN THE FIRST QUARTER 2005

Domestic consumption of primary antimony in the first quarter of 2005 was estimated by the U.S. Geological Survey to be about 2% greater than that of the fourth quarter of 2004 and about 5% less than that of the first quarter of 2004. During the January-February period, China remained the main source of metal and also ore-concentrate imports, while Mexico remained the main source of oxide imports.

Antimony prices rose moderately during the first quarter. The Platts Metals Week New York dealer price for antimony metal started the first quarter in the range of \$1.33 to \$1.37 per pound and rose slowly to finish the quarter in the range of \$1.45 to \$1.50 per pound.

The largest capacity domestic antimony smelter (La Porte, TX) closed at the end of 2004, as expected. The parent firm, GLCC Laurel LLC, a joint venture of Great Lakes Chemical Corp. (Indianapolis, IN) and Laurel Industries, Inc. (Dallas, TX), a subsidiary of Occidental Chemical Corp., had announced the closure in early 2004. The operations conducted at La Porte, TX, will be consolidated into the existing Great Lakes antimony production facility in Reynosa, Mexico. The closure leaves the United States with only one producer of antimony products, the United States Antimony Corp. (USAC), based in Montana.

In China, production returned to full capacity of 24,000 metric tons per year in April at Hsikwangshan Twinkling Star Co.'s Lengshuijiang City facilities in central Hunan Province. A

power reduction at the company's North Mine and smelter had forced closure of these facilities and reduced company output by one half from early February to mid-March. Production had continued at the South smelter during the shutdown (Metal Bulletin Daily, 2005).

A consulting firm estimated that overall demand for flame retardants in the United States would show substantial growth. Freedonia Group Inc. (Cleveland, OH) projected that demand for flame retardants would increase 3.1% annually to more than 453,000 metric tons in 2008. Antimony trioxide sales were projected to increase 6.8% annually to reach \$110 million by 2008 (Metal-Pages, 2005§1).

Reference Cited

Metal Bulletin Daily, 2005, Chinese antimony producer returns to full capacity: Metal Bulletin Daily, no. 8390, April 21, p. 3.

Internet Reference Cited

Metal-Pages, 2005 (March 23), U.S. demand for flame retardants flares, accessed April 7, 2005, via URL http://www.metal-pages.com.

¹A reference that includes a section mark (§) is found in the Internet Reference Cited section.

$\label{eq:table 1} \textbf{TABLE 1} \\ \textbf{SALIENT ANTIMONY STATISTICS}^1$

(Metric tons, antimony content, unless otherwise specified)

	20	2005		
	Total ^p	Fourth quarter	First quarter	
Production:				
Primary smelter ²	W	W	W	
Secondary	4,150 ^r	1,050 ^r	W	
Imports for consumption:	33,500	9,730	4,400 ³	
Ore and concentrate	1,750	139	20 3	
Metal	8,270	2,290	965 ³	
Oxide ⁴	23,500	7,310	3,420 3	
Exports:	4,480	761	771 ³	
Metal, alloys, and scrap (gross weight)	566	142	97 ³	
Oxide ⁴	3,910	619	674 ³	
Consumption of primary antimony	12,300 ^r	2,740 ^r	2,800	
Price: Average cents per pound ⁵	130.31	139.02	142.50	
Stocks, end of period ⁶	XX	2,010 ^r	2,040	

^pPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data. XX Not applicable.

TABLE 2 INDUSTRY STOCKS OF PRIMARY ANTIMONY IN THE UNITED STATES $^{\rm I}$

(Metric tons, antimony content)

	2004 ²	2005	
Class of material	Fourth quarter	First quarter	
Metal	W	W	
Oxide	1,550 ^r	1,580	
Other ³	455 ^r	457	
Total	2,010 ^r	2,040	

^rRevised. W Withheld to avoid disclosing company proprietary data.

¹Data are rounded to no more than three significant digits, except prices.

²Nearly all primary smelter output is antimony trioxide.

³Data for January and February only; March data were not available at time of publication.

⁴Antimony content is calculated by the U.S. Geological Survey.

⁵New York dealer price for 99.5% to 99.6% metal, c.i.f. U.S. ports.

⁶Producer and consumer stocks.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Estimated 100% coverage based on reports from respondents who held 88% of the total stocks of antimony at the end of 2003.

³Includes ore and concentrate, sulfide, and residues.

 ${\bf TABLE~3}$ INDUSTRIAL CONSUMPTION OF PRIMARY ANTIMONY $^{1,\,2}$

(Metric tons, antimony content)

	2	2004 ²		
Class of material consumed	Total ^{r, p}	Fourth quarter ^r	First quarter	
Oxide	10,500	2,440	2,370	
Other ³	1,840	299	428	
Total	12,300	2,740	2,800	

^pPreliminary. ^rRevised.

TABLE 4 REPORTED CONSUMPTION OF PRIMARY ANTIMONY, BY CLASS OF MATERIAL PRODUCED $^{\rm 1}$

(Metric tons, antimony content)

	20	2004^{2}		
Product	Total ^{r, p}	Fourth quarter ^r	First quarter	
Metal ³	2,840	476	685	
Nonmetal ⁴	5,020	1,220	1,160	
Flame-retardants:				
Plastics	1,790	480	335	
Other ⁵	2,700	562	624	
Total	4,490	1,040	959	
Total reported	12,300	2,740	2,800	

^pPreliminary. ^rRevised.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²Estimated 100% coverage based on reports from respondents who consumed 29% of the total antimony in 2003.

³Includes ores and concentrates, metal, sulfide, and residues.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

 $^{^2\}mathrm{Estimated}$ 100% coverage based on reports from respondents who consumed 29% of the total antimony in 2003.

³Includes ammunition, antimonial lead, bearing metals and bearings, cable coverings, castings, sheet and pipe, and solder.

⁴Includes ammunition primers, pigments, ceramics and glass, and plastics.

⁵Includes adhesives, pigments, rubber, and textiles.

 $\label{eq:table 5} \text{U.S. IMPORTS FOR CONSUMPTION OF ANTIMONY, BY CLASS AND COUNTRY}^{1}$

(Metric tons, antimony content)

		2004			2005		
	-		Fourth			January-	
Class and country	Total ^{p, 2}	December	quarter	January	February	February	
Ore and concentrate:							
China	1,380	59	139		20	20	
Other	374						
Total	1,750	59	139		20	20	
Metal:							
China	5,820	426	1,940	216	237	453	
Mexico	785	156	211	194	54	247	
Peru	501		36	36	36	72	
Other	1,160	17	105	162	30	192	
Total	8,270	599	2,290	608	357	965	
Oxide: ³							
Belgium	1,750	45	349	84	150	235	
China	10,700	1,120	3,590	845	447	1,290	
Hong Kong	432	83	183	33	33	66	
Mexico	9,590	997	3,060	726	1,040	1,770	
South Africa	656		99				
Other	323	2	31	52	7	59	
Total	23,500	2,240	7,310	1,740	1,680	3,420	
Grand total	33,500	2,900	9,730	2,350	2,060	4,400	
Other antimony compounds (gross weight)	150						

Preliminary. -- Zero.

Source: U.S. Census Bureau.

 $^{^{1}\}mbox{Data}$ are rounded to no more than three significant digits; may not add to totals shown.

²May include revisions to prior months data.

³Antimony content is calculated by the U.S. Geological Survey.